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Bettina FATH, et al

~~Applicant's Remarks Should be Considered~~

At the outset, Applicants respectfully request that the remarks be considered in view of the fact that these remarks could not have been presented earlier. This is because the combination of Penska/Kurz, was not applied at an earlier time.

In addition, a portion of the remarks explains Applicants' test results, which are believed to comprise unexpected and superior results. The results described are completely disclosed in the specification and, as such, do not raise new issues or introduce new matter. The MPEP indicates that such evidence must be considered against the prior art teachings.

Objective evidence or secondary considerations such as unexpected results, commercial success, long-felt need, failure of others, copying by others, licensing, and skepticism of experts are relevant to the issue of obviousness and must be considered in every case in which they are present. When evidence of any of these secondary considerations is submitted, the examiner must evaluate the evidence. MPEP § 2141. (Emphasis added).

It is noteworthy that the Federal Circuit has held that it is error not to consider evidence presented in the specification. See, e.g., *In re Soni*, 54 F.3d 746, 750, 34 USPQ2d 1684, 1687 (Fed. Cir. 1995), (error not to consider evidence presented in the specification).

The remarks relating to the obviousness rejection may be divided into two parts: (a) the basis for concluding that the results were superior; and (b) the lack of disclosure in the references that would have rendered such a result predictable.

Therefore, in view of the unexpected results described below, the absence of any disclosure capable of rendering said results foreseeable is clear evidence that the references cannot have provided adequate motivation or suggestion to combine the references to render the claimed composition obvious.

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NEW MATTER

Examiner alleges that the previous amendment to claim 1 added new matter.

Although Applicants disagree, the claim has been amended to recite a pH of between 4 and 6.5. This limitation is expressly supported on page 9 of the specification.

It is respectfully requested that the rejection be withdrawn.

OBJECTION TO CLAIM 6

Claim 6 has been amended to recite a specific concentration range at which the green tea extract is present. This is supported the disclosure at the bottom of page 5.

It is respectfully requested that the objection be withdrawn.

OBVIOUSNESS OVER PENSKA AND KURZ

Claims 1-5, and 7-8 are believed obvious over the combination of Penska and Kurz. Penska's discloses compositions with high levels of CO₂-infused fluorocarbons for the purpose of enhancing blood flow to the skin. More specifically, Penska's Example 6 discloses a hair and/or skin care composition in the form of an O/W emulsion that further comprises green tea extract. Penska also teaches the addition of UV blockers, including TiO₂.

Examiner cites Kurz as a secondary reference for teaching sunscreen compositions having mica and TiO₂ particles.

Claims 4 and 5 are alleged to be obvious over Kurz's disclosure of UV-absorbing compounds at col. 5, lines 22-38. Mica/TiO₂ particles are listed in col. 2, with various VIS and IR wavelength absorbers.

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Claim 9 is rejected over Penska in view of Kurz and Ansmann.

~~REDACTED~~

The crux of the rejection is that the combination of Penska and Kurz provide a list of components that Examiner believes to approximate the claimed composition. In particular, the references describe the UV and IR/VIS blockers that are recited by the claims.

Kurz's entire disclosure is geared toward sunscreens that provide a broad scope of protection at different wavelengths, from IR to UV to VIS. See Kurz, generally col. 2 to 5.

It cannot reasonably be disputed that Kurz's disclosure of various components, including mica/TiO₂ (Tiniiron®) are solely and completely limited to their function as IR/VIS light-absorbing components. Applicants' disclosure of mica/TiO₂ particles does not relate the particles to filtering light of any wavelength.

But more important is the fact that the Applicants have unexpectedly discovered that hair care formulations comprising mica/TiO₂ demonstrate superior hair-managing properties. In addition, these enhanced properties are observed in the absence of prolonged irradiation of the hair with light of any wavelength. There is no disclosure in Kurz that could have reasonably been viewed as suggesting that such benefit would result by adding any of Kurz's UV blockers to Penska's composition of Example 6.

On page 11 of the specification is a test wherein hairdressers assessed the effects of the claimed composition. Composition 1, as disclosed in Example 1, and composition 1A are identical except that composition 1A lacks pigment particles, i.e., mica/TiO₂. See page 10, penultimate paragraph. Compositions 1 and 1A were tested in parallel before (a) and after (b) the hair samples were dried. Note that the term "strands" as used here does not relate to single hairs, but to a group or tress of hair.

The results of the experts' opinions based on conventional hair-styling criteria are shown in the table on page 11. The experts' ratings disclose that Composition 1, which included mica/TiO₂ particles, provided substantially superior performance in comparison to composition 1A.

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Also note that this test was not performed +/- UV exposure. Thus, any hair management benefits imparted by composition 1's inclusion of mica/TiO2 cannot have been expected based on Kurz's disclosure. Kurz does not even refer to hair manageability and how to effect it.

Two important points need to be made:

- The presence of mica/TiO2 particles enhanced the performance of composition 1 on both wet hair and dry hair in the absence of UV-irradiation.
- The observation that 24 hours of UV exposure intensified these effects on hair treatment is not relevant because mica/TiO2 particles are not UV blockers; see Kurz, col. 2, lines 44 et seq. Thus, it is likely that mica/TiO2 provides a benefit to hair stylability that does not immediately dissipate whether or not hair is irradiated. It is likely the UV effect is based on the presence of conventional UV-blocker phenyl benzimidazole-5-sulfonic acid. See the recipe of composition 1; and the middle of page 2.

Applicants also disclose, on the bottom of page 12, that the composition of Example 2 provided similar benefits when tested.

In sum, the results on page 11 could not be predicted from the combination of Penska and Kurz alone. Neither reference, explicitly or implicitly suggests that the above-demonstrated benefits to hair styling, could be reasonably expected from combining any aspects of their disclosures.

Respectfully, Examiner has not provided any evidence or rationale to suggest that such results would have been expected.

Penska's test results relate to measuring blood flow to the skin. Kurz has no results of any type. Thus, Penska nor Kurz, taken individually or in combination, could not have taught or suggested Applicants' claimed composition.

Accordingly, allowance of the claims is respectfully requested.

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~~Penska/Kurz cannot render the claimed properties~~

Unexpected results is one way to rebut the presumption of obviousness based on chemical composition's having structural similarity – *to show that the claimed invention exhibits some superior property or advantage that a person of ordinary skill in the relevant art would have found surprising or unexpected. In re Soni* 34 USPQ2d 1684, 1687 (Fed. Cir. 1995).

In this case, there is nothing in the combined disclosures of Penska and Kurz that could have informed persons of ordinary skill in the art that the claimed compositions would have had superior hairstyling properties. There is no discussion in the references of hair styling criteria. Aside from only sporadic, cursory references to hair, neither reference disclosed any combination of components that would have suggested a composition with the enhanced styling properties that Applicants have observed and disclosed.

Nothing in Penska and/or Kurz even remotely suggested that the mica/TiO₂ particles may be useful for hair management.

Accordingly, Applicants request that the rejection over Penska/Kurz be withdrawn in view of the references' failing to teach the superior properties of the invention.

CONCLUSION

Applicants have addressed each of the rejection and objections raised.

The new matter rejection and objection to claim 6 have been properly addressed by amendment.


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In addition, the Applicants' specification demonstrated that their compositions have superior properties, in part due to the addition of mica/TiO₂ particles. This unexpected benefit could not have been foreseen based on knowledge in the art or the references.

The claims are in condition for allowance, and allowance is respectfully requested.

Respectfully Submitted,

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MARK UP OF THE AMENDED CLAIMS

1. (Amended) An aqueous hair care composition, comprising
- a) at least one UV-absorbing substance, and
 - b) at least one mica /titanium dioxide pigment wherein at least 90% by weight of the mica /titanium dioxide pigment comprises a particle size between about 10 and 250 microns,
 - c) green tea extract, and
- wherein the entire composition has a pH between 4 and 6.5 ~~no greater than about 6.~~

6. (amended) Hair care composition according to claim 1, wherein the composition ~~additionally contains~~ the wt.-% of the green tea extract is from 0.01% to 10.0% based on the total composition.